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ABSTRACT

An annotated list of tests for assessing students' learning abilities is provided in this document. Each annotation contains information that helps the educator gauge the negative and positive aspects of the tests. Information useful in understanding intelligence quotient (IQ) subscores and their implications is included. The tests described are categorized as reading tests, a comprehensive psychoeducational test, critical thinking tests, language tests, mathematics tests, memory tests, and an intelligence test. Classification ratings for IQs on the Wechsler Adult Intelligence Scale--Revised (WAIS-R) and Slosson Scales, implications of low scores and instructional applications of the verbal and performance tests of the WAIS-R, and implications of low scores and recommended instructional strategies for the annotated tests are outlined. Also included are 10 possible criteria for diagnosing learning disabilities and high risk students. Finally, six recommendations to facilitate learning for learning disabled students are provided in the following areas: (1) advocacy; (2) priority scheduling; (3) academic support; (4) developmental classes; (5) supplementary instructional materials; and (6) modifications of general examinations. A 13-item list of references is included. (SLD)

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Going the Extra Mile:

Formal Diagnosis In The Learning Center

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Since assessment is rapidly becoming an intermining what strategies will be most effective for teaching and learning, the following information should be helpful for educators who are involved in assessing student progress and performance.

The information in this article can be used as a guideline for evaluating individualized tests that can be used in learning centers or by individual educators to assess student's learning abilities, both weaknesses and strengths. The annotated list of tests was developed as a practical tool for quickly gauging the negative and positive elements of these tests. Also included is information useful in understanding IQ subscores and their implications. Finally, criteria for diagnosing Learning Disability students and some recommendations for assisting students academically conclude this article.

ANNOTATED TEST LIST READING

Woodcock Reading Mastery Tests Revised

This 'est is an individually administered reading test which focuses on word recognition, word attack, word comprehension and passage comprehension. It gives the examiner a chance to see the student's specific strengths and weaknesses.

Positive

Facilitates educational planning and specific strategies

Negative

The word comprehension and passage comprehension scores tend to be somewhat inflated

Time consuming to administer

Woodcock-Johnson Psycho-Educational Battery -- Part II

The Woodcock-Johnson is an individually administered reading cluster. This cluster consists of word identification and passage comprehension. The cluster score converts to a grade equivalency score.

Positive Negative

Quick to Administer

Not as thorough as the Woodcock Reading Mastery Test

Quick to score

Reveals a grade equivalency

COMPREHENSIVE PSYCHO EDUCATIONAL TEST

The Woodcock-Johnson Psycho-Educational Battery -- Part I (W-J P-E)

The W-J P-E Battery is a wide-range comprehension set of tests for measuring cognitive ability and academic aptitudes.

The Cognitive Factor Cluster includes oral language, broad reasoning, perceptual speed & memory

The Scholastic Aptitude cluster includes a determination of reading aptitude, math aptitude, written language aptitude and knowledge aptitude.

Positive	Negative
Gives a broad ability score	Requires about an hour to administer
Gives scholastic aptitudes	Time-consuming to score



CRITICAL THINKING

Cornell Critical Thinking Test -- Level Z

The Cornell Critical thinking Test is a group or individual critical thinking tests designed to evaluate general critical thinking skills including induction, deduction, assumption identification, semantics, credibility and definitions.

Positive	Negative
Simple to score	Time consuming to administer
Reveals difficulties with reading and reasoning	Students find this test extremely challenging

Watson-Glaver Critical Thinking Appraisal

The Watson-Glaser Critical Thinking Appraisal is a group or individual standardized test designed to evaluate analytical and logical reasoning. The subtests are inferencing, recognition of assumptions, deduction and interpretation and evaluation of arguments.

Positive	Negative
Simple to score	40 minutes to administer
Reveals difficulties with reading and reasoning	Challenging

LANGUAGE

Test of Written Language - 2 (TOWL-2)

The TOWL is an individual language test which gives the students' overall written language quotient including score for the students' contrived and spontaneous writing.

Positive	Negative
Indicates specific strengths and weaknesses	Subjective scoring
Thorough evaluation of English skills	Time consuming to administer and correct



Test of Adolescent Language (TOAL-2)

The TOAL is an individual language test which also includes an evaluation of the students' listening, reading and speaking skills.

Positive	Negative
All encompassing evaluation of language skills including	Very time consuming to correct and administer

Eliminates subjective scoring

expressive and receptive language

Includes a spontaneous writing selection

MATH

Woodcock-Johnson Psycho-Educational Battery -- Part II. Meth

The Woodcock-Johnson-Math is an individually administered math test which involves calculation and applied problems.

Positive	Negative
Gives grade equivalents of math skills	Somewhat brief
Quick to give and score	

Wide Range Achievement Test - Mathematics Subtest (WRAT)

The WRAT is a ten minute timed computation test, with grade equivalents which include elementary and high school levels.

Positive	Negative
Quick to administer & score	Penalizes the slow worker
	Difficult to complete in 10 minutes



MEMORY TESTS

Non-Verbal Selective Reminding Test

The Non-Verbal Selective Reminding Test is a normed individual memory test that measures visual long-term storage and retrieval.

Positive Negative

Quick to give Complicated to score

Selective Reminding Test

The Selective Reminding Test is a normed individual memory test that measures long-term verbal memory including storage and retrieval.

Positive Negative

Quick to give Complicated to score

INTELLIGENCE TEST

Wechsler Adult Intelligence Scale-Revised (WAIS-R)

The WAIS-R is an individually administered intelligence test that measures verbal and performance IQ. The subtests can be very informative as they reveal patterns of cognitive weaknesses and strengths.

Positive	Nega tive
Can reveal learning disabilities	Requires administration by highly trained examiner
Can reveal areas of cognitive difficulty	
•	Time consuming to administer and
Helpful in making educational decisions	score



7 -

CLASSIFICATION RATINGS FOR IQ'S ON THE WOCHSLER AND SLOSSON SCALES WAIS-R

<u>1Q</u>	Classification
130 and above	Very Superior
120-129	Superior
110-119	High Avanage
90-109	Average
80-89	Low Avanage
70-79	Borderline
69 and below	Mentally Deficient or
	Mentally Retarded

WAIS-R	Sub Score Range
1 - 4	Very Limited Learner
5 - 6	Limited Learner
7 - 8	Slow Learner
9 - 11	∆∨erage
12 - 14	Bright
15 - 17	Superior
18 - 19	Very Superior

SLOSSON IQ CLASSIFICATION CHART

Accomplishment and
<u>nent</u>
programs, college, graduate work
classes, college. graduate work
classes, college, graduate work
hool, college
hool, Junior college
arner classes, Vocational School
arner classes and classes for retarded
for retarded (Educable)
for retarded (Trainable)
ility Questionable School Inclusion
Exclusion or untrainable



IMPLICATIONS OF LOW SCORES

AND

INSTRUCTIONAL APPLICATIONS

OF THE WAIS-R

Sub Test Information

Verbal Test

POSSIBLE IMPLICATIONS OF LOW SCORES

INSTRUCTIONAL STRATEGIES

Information

Poor range of factual knowledge

Poor range of information

Poor memory

Tendency to give up easily

ESL background

Low achievement orientation

Stress factual material through use of reading newspaper articles, discussing current events, and doing memory exercises

Use enrichment activities

<u>Similarities</u>

Pour conceptual thinking

Difficulty in seeing relationships

Difficulty in selecting and and verbalizing appropriate relationships between two objects or concepts

Overly concrete mode of thinking

Rigidity of thought processes

Megativism

Focus on recognition of differences and likeliness

Use contrast/compare exercises

Teach language development and exercises involving abstract words, classifications, and generalizations



Arithmetic

inadequate ability in mental arithmetic

Poor concentration

Anxiety over a school-like task

Blocking toward mathematical tasks

Poor school achievement

Anxiety (e.g., worry over personal problems)

Develop basic arithmetic skills through use of practice and drills

Use concrete objects and actual problems to introduce concepts

Vocabulary

Poor word knowledge

Poor verbal comprehension

Poor verbal skills and language development

Limited educational or family background

Difficulty in verbalization

Foreign language background

Verbalization not encouraged in culture

Develop a working vocabulary through exercises in reading, speaking and writing

Use other verbal enrichment exercises i.e. crossword puzzles word games

Use 3x5 cards to increase knowledge of vocabulary

Learn words as concepts

Comprehension

Poor social judgment

Failure to take personal responsibility (e.g., overdependency, immaturity, limited involvement with others.)

Overly concrete thinking

Difficulty in expressing ideas

Creative individual looking for unusual solutions

Discuss and model the actions of others to help develop social awareness and social expectations

Employ role-play situations



10 ___

Digit Span

Anxiety Emphasize listening skills

Inattention Use oral sequencing activities

Distractibility Use short and simple

directions and repeat when

A possible learning deficit necessary

Difficulty in auditory sequencing

events and their consequences

OF LOW SCORES

Performance Test

POSSIBLE IMPLICATIONS INSTRUCTIONAL IMPLICATIONS

Picture Completion

Anxiety affecting concentration Focus on visual learning

and attention techniques stressing individual parts that make up the whole

Preoccupation with irrelevant details

Use visual perceptual activities

Negativism ("nothing is missing")

Use visual study strategies such as

mapping and charting

Picture Arrangement

Difficulty with visual Focus on cause and effect organization (sequencing) relationships and logical

Difficulty in anticipating events

Inattentiveness Use writing assignments where

Anxiety students supply the ending

Failure to use cues

Block Design

Poor visual-motor-spatial

integration

Use spatial-visual tasks and perceptual tasks involving breaking down an object and

breaking down an object and Visual-perceptual problems

besiding it up again

Poor spatial orientation Focus on part-to-whole relationships and working with a model or key

Object Assembly

Visual-motor difficulties

Visual-perceptual problems

Poor planning ability

Difficulty in perceiving a whole

Minimal experience with construction tasks

Limited interest in assembly tasks

Limited persistence

Visual-motor coordination difficulties

Distractibility

Visual defects

Poor pencil control

Disinterest in a school-like task

Excessive concern for detail in reproducing symbols exactly

Lethargy

Develop perceptual skills through quided practice in assembling parts into familiar configurations

Encourage trial-and-error activities

Focus on interpretation of wholes from minimal cues

Coding

Use visual-motor learning exercises, ie. computer and video activities



12 _

Laskey and Totoraitis
Going the Extra Mile

IMPLICATIONS OF LOW SCORES AND RECOMMENDED INSTRUCTIONAL STRATEGIES FOR ANNOTATED TESTS

POSSIBLE IMPLICATIONS OF LOW SCORES

INSTRUCTIONAL STRATEGIES

Woodcock Reading Mastery Revised

Test 1 Visual Auditory Learning

Not applicable to high school/college students.

Test 2 Letter identification

Not applicable to high school/college students.

Test 3 Word Identification

Poor sight vocabulary Build schema

Dyseidetic Use 3x5 cards for vocabulary

development

Poor memory

Use whole language approach

Limited cultural experience
Use the impress or echo method

Test 4
Word Attack

Dysphonetic Teach vocabulary through context

Use echo system to enhance

pronunciation

Teach word relationships

Test 5
Word Comprehension

Poor critical thinking skills Build schema

Poor vocabulary knowledge Build vocabulary through use of

concepts

Possible lack of strong cognitive

ability Develop critical thinking skills

Poor schema Place students in developmental

reading course

Teach word relationships



Test 6 Passage Comprehension

Lacks context skills

Teach context skills

Poor comprehension Build comprehension skills

Slow reading speed Place students in developmental

courses

Woodcock-Johnson Psycho-Educational Battery-part !!

Poor basic math skills Placement in a remedial math class

Poor memory Participate in a tutorial

Test anxiety Review of basic math skills

Get affective support

Woodcock-Johnson Psycho-Educational Battery-part L

Discrepancies between cognitive Placement in exceptional education

factor clusters

Low verbal ability scores Develop oral listening vocabulary and

speaking vocabulary

Low reasoning cluster scores

Teach step-by-step basic reasoning

processes, can be incorporated into reading comprehension activities

Low memory cluster scores

Teach techniques for developing

memory, i.e. focusing, chunking new information, reviewing information

Cornell Critical Thinking Test and Watson-Glaser Critical Thinking Appraisal

Poor comprehension Teach inductive and deductive

reasoning

Lacks critical thinking skills

Teach inferencing skills

Poor inferencing skills

Place student in developmental

reading class

Teach word relationships



Test of Written Language-2

Low contrived writing score

Low spontaneous writing score

Test of Adolescent Language-2

Low scores in listening vocabulary

Low listening grammar

Low speaking vocabulary and speaking grammar

Review spelling

Teach basic rules of punctuation and capitalization

Practice writing simple logical sentences

Progress to more complex sentences writing and combining

Encourage and reinforce the act of writing

Present students with open-ended questions to be developed

Provide numerous opportunities for the student to do expositiny and creative writing

Help student to develop sentence building strategies; then develop these into cohesive paragraphs

Give practice exercises where students must listen, take notes and then answer questions based on newly learned information

Give students opportunity to present expository information and then question classmates

Encourage students to give oral presentations

Teach basic reading comprehension strategies, i.e. K-W-L, etc.

Review spelling

Teach basic rules of punctuation and capitalization

Practice writing simple logical sentences



Low reading vocabulary and reading grammar

Low writing vocabulary and writing grammar

Progress to more complex sentences writing and combining

Encourage and reinforce the act of writing

Present students with open-ended questions to be developed

Provide numerous opportunities for the student to do expositiny and creative writing

Help student to develop sentence building strategies; then develop these into cohesive paragraphs

Wide Range Achievement Test-Level 2-Math

Poor basic math skills

Poor memory

Test anxiety

Placement in a remedial math class

Participate in a tutorial

Review of basic math skills

Get affective support

Nonverbal Selective Reminding Test (visual)

Difficulty with remembering printed material

Limited vocabulary

Lack of visual learning strategies

Participate in talking books

Read text orally

Join study groups

Use 3x5 cards for short amount of information and vocabulary words

Selective Reminding Test (auditory)

Poor auditory memory

Limited retrieval strategies

Poor retention

Difficulty with test taking

Tape record lectures

Teach visual strategies as cues to

retrieval of information

Focus on reading more than lecture

Focus on instructor's visual cuesblackboard, overheads, etc.



POSSIBLE CRITERIA FOR DIAGNOSING LEARNING DISABILITY AND HIGH RISK STUDENTS

- 1. Full scale I.Q. score Wechsler Adult Intelligence Scale-Revised (WAIS-R) within the average range or high-low average range
- 2. One or more standard deviations between the verbal and the performance of the WAIS-R
- 3. Wide disparity between sub scores on the WAIS-R
- 4. Uncommon errors on informal/formal written exercises especially when the errors are inconsistent with the persons given abilities, i.e. phonetic spelling at an adult açe
- 5. Low percentile scores, as compared to ability level in reading, when an appropriate amount of time was spent taking the test
- 6. Previously diagnosed as a LD in elementary/secondary school
- 7. More than one standard deviation away from the mean on memory tests, i.e. Selective Reminding or memory subtest on the Woodcock Johnson
- 8. Having a confirmed diagnosis as Dyslexic when evaluated by a competent diagnostician
- 9. Weak high school transcript
- 10. Poor self perception of academic skills

RECOMMENDATIONS to FACILITATE LEARNING for the LEARNING DISABLED STUDENT

1. Advocacy

The first goal for the learning disabled student is to understand their specific academic needs and to relay them to professors and academic support staff.

2. Priority Scheduling

Students who are learning disabled need to be given first priority when scheduling classes. A schedule should be flexible and reflect the student's needs, for example, placement in smaller classes and lighter academic load.

3. Academic Support

Tutoring-peer/professional, paired learning, study groups. Various types of academic support should be made available to the learning disabled student.



17 -

4. Developmental Classes

Developmental classes are designed to build and reinforce basic skills, enhance background knowledge and through repetition and practice, prepare the learning disabled student to enter higher level courses. These may include reading, study skills, math and English.

5. Supplementary Instructional Materials

Taped textbooks, talking books, video taped classes, class outlines

6. General Exam Modifications

Specific adjustments for testing often are necessary and can include oral exams, extended time, and/or a reader.



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18 Laskey and Totoraitis Going the Extra Mile

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